that there could be a difference between collisions that actually occur on the curve and collisions that are related to the curve. This study did not investigate this difference.

In the data analysis tables presented in this paper, some column totals might not sum to 100% because of rounding. The data are presented as collision percentages rather than as collision frequencies for easier comparison. In the tables, "2-lane curve collisions" represent the collisions reported on two-lane curves, "all 2-lane collisions" represent the collisions reported on all two-lane roadways throughout NC, and "all roads collisions" represent the collisions reported on all roads throughout NC.

4.4.1 Road Characteristics

Aspects of the roadway itself significantly affect collisions. Table 2 reports on geometric roadway characteristics for two-lane and all-road collisions. The terms in Table 2 are, for the most part, well understood. However, their precise numerical definition does not exist on the collision data reporting form. Instead, their use by a police officer can vary. Thus, in Table 2 the term level grade is taken to mean a perceptively level roadway. The data obtained by the police officer and reported herein is thus qualitative, although likely reasonable.

Table 2. Horizontal Curve Collision Geometric Roadway Characteristics

Road Characteristic	Grade	All 2-Lane Collisions		All Roads Collisions	
Tangent	Level	68%	77%	80%	78%
	Hillcrest		4%		4%
	Grade		18%		17%
	Bottom		1%		1%
Curve	Level	21%	56%	14%	53%
	Hillcrest		4%		6%
	Grade		37%		38%
	Bottom		3%		3%
Other	N/A	10%	0%	6%	1%
Uncoded	N/A		100%		99%

Table 2 shows that 21% of all two-lane road reported collisions occur on horizontal curves, compared to 14% among all roads statewide. Curve collisions occur more often on roadways sections with a grade (37% for all two-lane roads, 38% for all roads) rather than on tangent sections on a grade (18% for all two-lane roads, 17% for all roads). The reported curve collisions primarily occur in rural locations (70%), compared to 62% of all two-lane collisions and 45% of all statewide collisions (Table 3). It appears that rural, horizontal curves are particularly susceptible to collisions.